

CLAIMS

1. A door device (10) comprising at least one door (11) for opening and closing a passage (27) and

5 comprising one door frame (12) in which said door (11) is held in a displaceable manner, and

comprising at least one vertical air curtain device (30), which essentially extends over the entire height of the passage (27), and which generates an exiting air curtain (33) such that the passage (27) is covered by said air curtain (33) when said door (11) is open,

10 characterized in that

the door device (10) is provided with at least one additional identification system (40), wherein

this one contains at least one sensor unit (41), one control unit (42) and one output unit (43), which are connected to each other and

15 at least one sensor unit (41) of said identification system (40) is integrated in said air curtain device (30) or the housing thereof.

2. A door device according to claim 1, characterized in that said air curtain device (30) with the integrated sensor unit (41) is provided as door post (13) of door frame (12).

3. A door device (10) according to claim 1, characterized in that said air curtain device (30) with the integrated sensor unit (41) is placed on the displaceable door (11).

4. A door device (10) according to one of the claims 1 through 3,
5 characterized in that said door device (10) is provided with a one-piece or multi-piece sliding door (15) and said door frame (12) at least holds one mobile door (11) in a longitudinally displaceable manner.

5. A door device (10) according to one of the claims 1 through 3,
characterized in that said door device (10) is provided with a one-piece or
10 multi-piece double-wing door (17) and the door frame (12) holds at least one mobile door (11) in a rotational manner and a part of said sensor unit (41) can be provided in a double-wing door (17) itself.

6. A door device (10) according to one of the claims 1 through 3,
characterized in that said door device (10) is provided with a revolving door
15 (19), wherein the displaceable door (11) is present as an at least two-wing insert (19), which can rotate in use around a central rotation axis (22), and the circular cylindrical door frame (21) accommodates said insert (19) in a rotational manner.

7. A door device (10) according to one of the claims 1 through 6,
characterized in that said door (11) can be automatically displaced by means of
a drive unit (24), such that it automatically opens and closes the passage (27).

8. A door device (10) according to claim 7, characterized in that said drive
5 unit (24) of the automatic door (11) can be controlled by the output unit (43) of
said identification system (40), whereby said door (11) can be opened or closed
depending on the respective application case.

9. A door device (10) according to one of the claims 1 through 8,
characterized in that the sensor unit (41) contains a plurality of sensors (46),
10 which are installed in intervals over the height of said passage (27) in said air
curtain device (30).

10. A door device (10) according to one of the claims 1 through 8,
characterized in that said sensor unit (41) is equipped with at least one
antenna-like sensor (47), which essentially extends over the entire height of said
15 passage (27) in said air curtain device (30).

11. A door device (10) according to one of the claims 1 through 10,
characterized in that said sensor unit (41) contains different sensors (46) which

detect different measurable variables and transmit the signals, which result from this, to the control unit (42) for evaluation and processing.

12. A door device (10) according to one of the claims 1 through 11,
characterized in that said identification system (40) is a goods securing system,
5 in which secured goods in the passage area of said door (11) are recognized by
said sensor unit (41) and a signal is transmitted to said control unit (42), which
evaluates this signal and sends a corresponding alarm signal to said output unit
(43).

13. A door device (10) according to one of the claims 1 through 11,
10 characterized in that said identification system (40) is a stock control system, in
which the incoming and outgoing goods are recognized by said sensor unit (41)
in the passage area of said door (11) and the generated signals are transmitted to
said control unit (42), which exploits and further processes these signals.

14. A door device (10) according to one of the claims 1 through 11,
15 characterized in that said identification system (40) is a time detection system,
in which the time of incoming and outgoing persons in the passage area of said
door (11) is detected by said sensor unit (41) with respect to each single person

and the generated signals are transmitted to said control unit (42), which exploits and further processes these signals.

15. A door device (10) according to one of the claims 1 through 11,
characterized in that said identification system (40) is a person control system,
5 which respectively identifies incoming and outgoing persons in the passage area
of said door (11) by means of said sensor unit (41) and the generated signals are
transmitted to said control unit (42), which exploits and processes these signals.

16. A door device (10) according to one of the claims 1 through 15,
characterized in that said identification system (40) also contains an input unit
10 (44), which is connected to said control unit (42), whereby an additional safety
or identification code can be transmitted to said control unit (42), in addition to
the received signals of said sensor unit (41).

17. A door device (10) according to one of the claims 1 through 16,
characterized in that said control unit (42) of said identification system (40) is
15 linked to said air curtain device (30) via a data transmission system and is
hereby able to send and receive data, whereby also active elements, in particular
the fan, the heating and the nozzle of said air curtain device (30) can be
triggered.

18. A door device (10) according to one of the claims 1 through 16,
characterized in that said identification system (40) also acquires climatic data
from the area around said door (11) by means of other sensors (46) and
transmits them to said control unit (42), whereby the active elements of said air
5 curtain device (30), which is itself connected to said control unit (42), can be
triggered.

19. A door device (10) according to one of the claims 1 through 17,
characterized in that said control unit (42) of said identification system (40) is
linked to an external central computer via a data transmission system, and can
10 hereby send and receive data.